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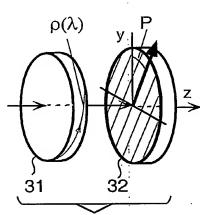
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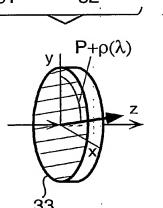
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(54) Title: DEVICE AND METHOD FOR AN OPTICAL TUNABLE POLARIZATION INTERFERENCE FILTER





(57) Abstract: The invention provides a tuner as constituent component for constructing a tunable or switchable spectral filter, including single and multiple stage filters and fitters without intermediate polarizer, over a wavelength range, which is characterized in that it comprises elements arranged in cascade along a light beam axis including a dispersive polarization rotator, having its rotation angle  $p(\lambda)$  varying as a function of light wavelength  $\lambda$  over said wavelength range; an orientation-sensitive polarizing element, and means for rotating said polarizing element or/and varying said rotation angle  $p(\lambda)$ ; whereby said polarization rotator and said polarizing element are arranged in series in said spectral fitter along said light beam axis with said polarizing element oriented at a predetermined orientation angle related to the structure of said spectral filter, and said tuner is operated by rotating said polarizing element to change its orientation in said filter or/and by changing said rotation angle  $p(\lambda)$ . The invention is also concerned with said filters and furthermore tuning methods for tuning said filters.



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